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ABSTRACT

This document is designed to establish consistency in the definition and format to be used in developing early literacy standards and benchmarks. It articulates a set of standards and benchmarks that is based on current national and state standards documents and that reflects the foundational knowledge and developmental differences representative of the research on early literacy development and the prekindergarten and kindergarten levels. It also provides sufficient and appropriate information aligned with the standards and benchmarks to aid prekindergarten and kindergarten teachers in assessing the early literacy development of their students. For standard 1, "Demonstrates competence in the general skills and strategies of the reading process," five benchmarks are outlined. For standard 2, "Demonstrates competence in the general skills and strategies of the writing process," three benchmarks are established. Appendixes contain a list of 72 sources on research and theory of early childhood development, a list of 25 national and state standards documents reviewed, and a list of definitions. (SLD)



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ED 446 141

# A Framework for Early Literacy Instruction

## Aligning Standards to Developmental Patterns and Student Behaviors

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# I. Introduction

In recent years, many major studies (National Reading Panel, 2000; Snow, Burns, & Griffin, 1998) have found that the seeds of literacy are planted before children begin formal instruction in reading and writing. There is now a great deal of empirical evidence that differences in pre-literacy experiences and the different development they foster are associated with varied levels of reading achievement. For example, recent studies of kindergartners (West, Denton, & Germino-Hausken, 2000) found that upon entry to kindergarten, only 37 percent of the children in the study had basic familiarity with print. Furthermore, research shows that many children who begin school with fewer experiences in and less knowledge about literacy are unable to acquire the prerequisites quickly enough to keep up with formal reading instruction in first grade (see Snow, et al.) for a recent review).

As the empirical evidence has grown about the effects of pre-literacy experiences on subsequent academic achievement, so has the research on what content knowledge would be most appropriate for young children. Nationally recognized experts have identified general milestones of early literacy development in recent reports sponsored by the National Academy of Sciences (NAS), the National Reading Panel, the National Association for the Education of Young Children (NAEYC), and the International Reading Association (IRA). These general milestones are formulated in terms of age-appropriate expectations, such as "kindergarten-aged children develop basic concepts of print and begin to engage in and experiment with reading and writing" (International Reading Association & National Association for the Education of Young Children, 1998, p. 40). These expectations can serve as guidelines for "identifying challenging, but achievable goals or benchmarks for children's literacy learning" (p. 39).

Subsequent to the publication of these general milestones and following on the heels of the standards movement in higher grades, there has been a call to develop pre-k and Kindergarten content standards and benchmarks, similar to those in later grades. For example, the National Research Council's recent report on early childhood pedagogy recommends the development of content standards for early learning, including pre-literacy knowledge and skills (Bowman, Donovan, & Burns, 2000). At the federal level, this trend can be seen in recent revisions to the Head Start Act of 1981 that include a number of literacy performance measures not previously specified for children at this age (Head Start Act, 1998). Currently 49 of the 50 states have adopted state-level standards that include the kindergarten level (Kendall & Marzano, 1997).

The standards movement of the past several years has focused educators on instructional practices that best support student learning of the content identified in state and district curriculum frameworks; however, as these frameworks have been implemented, several critical issues have emerged.

In many of the national and state documents, standards were specified using a continuum of statements that represented various bands or grade levels (often referred to as benchmarks or indicators). Although this delineation provided some degree of clarity, the scope and sequence of knowledge children needed to master was incomplete and often did not identify the underlying foundational skills essential for early literacy development. The benchmarks typically represented what students ideally would have mastered by the end of the highest grade level within a band. That is, for grade span K-4, the benchmark represented the knowledge students should have mastered by the end of 4th grade. Due to the summative nature of these benchmarks, pre-k and Kindergarten teachers were often left to determine what knowledge their students would need to learn in order to be able to meet the benchmark at the end of the grade span.

In conversations concerning standards and their relationship to the national goal that all students will read by the end of 3rd grade, some educators began to place inappropriate and arbitrary expectations on young children. In some cases they forced the creation of grade level benchmarks that were unrealistic, developmentally inappropriate, or both, and that would result in "hurrying" or "accelerating" children through early literacy development without giving them sufficient time and instruction to master underlying cognitive concepts and skills. For example, although literacy acquisition constitutes a continuum with more advanced skills and concepts building on the foundation of more basic competencies, there are some qualitative differences between how young children develop their early understandings and how older children learn more advanced content. At the early grade levels, benchmarks often lacked the specificity that identified these qualitative differences.

Additionally, many of the standards documents reflected the "activities" students should be involved in rather than the actual "knowledge" they should be learning, resulting in benchmarks that were vague and open to much interpretation. Definitions and formats varied from one standards document to another, and the distinction between articulating the knowledge students should be learning (often referred to as content standards) versus the identification of the expected level of performance of that knowledge was often ambiguous and confounded. This lack of clarity caused confusion and frustration as teachers tried to align curriculum and instructional practices to standards and benchmarks.

As educators continued to implement standards and benchmarks, an expectation emerged that evidence of student learning would be collected through various assessment practices. At the early childhood level, this became a challenge, as young children cannot be tested like older children. Young children must be assessed in a context that has inherent meaning to them and is similar to the context in which children are likely to apply that knowledge. For example, reading a paragraph in a test booklet that has no pictures is not the same as reading the same paragraph in a storybook that is illustrated with bright, colorful drawings.

Furthermore, young children typically have not developed "test-taking" skills; that is, they cannot sit still and attend for long periods of time in a group, blacken test bubbles accurately, or switch from one set of directions to another. This meant that the collection of student evidence needed to be embedded in the classroom experience and occur through observation and the evaluation of work products of the individual student. The lack of clarity in the standards and benchmarks documents left pre-k and Kindergarten teachers with insufficient information and direction for collecting evidence on student learning. In some cases, teachers were not even sure what knowledge they were assessing, nor did they know how to align current research findings on early literacy development to these standards and benchmarks.

# II Purpose of This Document

The purpose of this document is to

A. Establish consistency in the definition and format to be used in developing early literacy standards and benchmarks;
B. Articulate a set of early literacy standards and benchmarks that is based on current national and state standards documents and that reflects the foundational knowledge and developmental differences representative of the research on early literacy development at the pre-k and kindergarten level; and
C. Provide sufficient and appropriate information aligned with this set of standards and benchmarks to aid pre-k and kindergarten teachers in assessing the early literacy development of their students.

## A. Establishing Consistency In Definition and Format

Throughout the national and state documents, the terms *standard* and *benchmark* often have different or diverse meanings. For the purpose of this document, we have defined a *standard* as a general statement that represents the information, skills, or both, that students should understand or be able to do. Standards typically address what knowledge students should have mastered by the end of their K-12 school experience; therefore, they are broad yet measurable statements.

A *benchmark* is a statement that reflects a developmental level of the information or skill that defines the general category articulated by the standard. That is, a benchmark translates the standard into what the student should understand and be able to do at developmentally appropriate levels. Benchmarks are much more specific than standards and provide more detailed information relative to a specific grade or course. Pre-k and kindergarten benchmarks would therefore translate the standards into statements that would be appropriate for students at these grade levels.

The set of early literacy standards and benchmarks identified in this document are a reflection of these definitions. Their format is consistent with these definitions — both the standards and benchmarks are written as statements of information and skills rather than activities or tasks. Mastery of the benchmark is assumed; thus, there are no benchmarks that start with statements such as "begins to," or "makes an effort to."

## B. Articulating Early Literacy Standards and Benchmarks

As previously mentioned, many of the benchmarks in the state and national documents represented a span of grade levels. Typically these benchmarks identified the expectations for the higher levels in that grade span; therefore, a need arose for more clearly depicting the concepts and skills underlying or leading to the benchmark for the earlier grades. Early literacy benchmarks need to be clear, concise, and developmentally appropriate — not just "dumbed-down" versions of higher grade benchmarks. They must also be a reflection of lessons learned from previous standards work and from current research and theory on early literacy learning and development.

Taking these issues into consideration, the following process was used to articulate a set of early literacy standards and benchmarks.

### *1. Review of Current Research and Theory on Early Literacy Development*

A review of current research and theory on the developmental patterns in the early literacy development of young children was completed. Appendix A contains a list of the research and theory reviewed. From this review, three major areas in which development must occur prior to the start of formal literacy instruction were identified: precursors to reading; precursors to writing; and foundational, cognitive, and linguistic skills. While it is possible to specify knowledge and skills that are mostly specific to early reading or writing development, it is much harder to specify general cognitive and linguistic skills since they affect far more than just literacy development. For this reason, only those standards and benchmarks that were precursors to reading and writing have been included in this document.

### *2. Review of Current National and State Standards Documents*

A review of the standards identified in current national and state documents that related to reading and writing development was completed. Appendix B contains a list of the documents that were reviewed. From this review, two standards that reflected the previously established definition and format found on page 3 of this document were constructed — one for reading and one for writing. (See Figure 1)

*Figure 1*

| Pre-K through Kindergarten Reading and Writing Standards | |
|---|---|
| Standard 1 | Demonstrates competence in the general skills and strategies of the reading process. |
| Standard 2 | Demonstrates competence in the general skills and strategies of the writing process. |


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The division of the standards and benchmarks into "reading" and "writing" skills and strategies was made to help the reader connect early literacy developments with later expectations specified in reading and writing standards for grades K-12. However, one should remember that in early childhood, literacy is even more integrated than it is for older children, and consequently, the same skills and knowledge will be supporting reading development.

*3. Identification of Major Categories Related To Early Literacy Development*

The major categories for the precursors to reading and writing benchmarks were identified as a result of the review of the developmental patterns found in current research and theory. (See Figure 2).

*Figure 2*

| Categories For Early Literacy Benchmarks | |
|---|---|
| Reading Categories | Writing Categories |
| Visual Letter Recognition | Letter Formation |
| Sound-To-Symbol Correspondence | Conventions of Writing |
| Sight Word Recognition and Decoding | Alphabetic Principles |
| Concepts of Print | Orthographic Knowledge |
| Conventions of Reading | Purpose of Writing |
| Phonological Awareness | |
| Text Comprehension | |
| Oral Language Development | |

These categories not only help give definition to the standards but also provide a structure for organizing the benchmarks using terms and phrases common to pre-k and kindergarten teachers.

*4. Articulation of Early Literacy Benchmarks*

Using the definitions and format previously established, the major categories selected, the review of the research on developmental patterns, and the review of current benchmarks from national and state documents, a set of benchmarks for pre-k through kindergarten was articulated for each of the selected standards (see Figure 3).

It should be noted that the review of the research clearly showed that early literacy development takes place at the time when a child undergoes rapid changes and developments in many areas. Many of a child's growing skills and abilities develop in concert and support each other while others seem to be relatively independent. In addition, individual variations in development may be significant to the point when the importance of a limited set of skills temporarily dominates the whole area (i.e., s some children can become readers by primarily building their sight word

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vocabulary and only later master the procedures of decoding). Thus, the benchmarks in this document are not listed in any specific order, either in importance or development.

*Figure 3*

**standard 1**

Demonstrates competence in the general skills and strategies of the reading process.

| Benchmarks | | Category |
|---|---|---|
| 1.1 | Knows the names of the letters of the alphabet in any context. | **Visual Letter Recognition** |
| 1.2 | Matches speech sounds with the letters or letter combinations that represent these sounds. | **Sound-to-Symbol Correspondence** |
| 1.3 | Converts written word into spoken word. | **Sight Word Recognition and Decoding** |
| 1.4 | Understands the basic concepts of print (e.g., word or sentence). | **Concepts of Print** |
| 1.5 | Knows the basic conventions of reading (e.g., purpose, parts, elements, and procedures). | **Conventions of Reading and Comprehension** |

**standard 2**

Demonstrates competence in the general skills and strategies of the writing process.

| Benchmarks | | Category |
|---|---|---|
| 2.1 | Knows the purpose of writing is to communicate with oneself and others. | **Purpose of Writing, Comprehension, and Oral Language Development** |
| 2.2 | Applies alphabetic principle with increasing complexity and conventionality when writing. | **Alphabetic Principle, Phonological Awareness, Sound-to-Symbol Correspondence, and Orthographic Knowledge** |
| 2.3 | Uses the basic conventions of writing (e.g., prints upper and lower case letters with proper directionality, spacing, punctuation, and capitalization) | **Letter Formation and Conventions of Writing** |

## C. Additional Information Necessary For Classroom Implementation

Although standards and benchmarks provide teachers with substantially more direction in what students should be learning, additional information is necessary for classroom implementation. If students are expected to master the knowledge addressed by the benchmark, they must be taught underlying conceptual understandings and skills that lead to that mastery. In gathering evidence of student performance on the benchmark, teachers need to observe how students are performing on this supporting knowledge. This evidence could direct teachers to areas where students might need additional support in learning the benchmark. To only articulate benchmarks without identifying



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information related to the implementation and observation of these benchmarks forces teachers to search out this information for themselves.

To assist the pre-k and kindergarten teacher in the implementation of the standards and benchmarks in this document, examples of the supporting knowledge or underlying information and skills that students need to learn for the specified standards and benchmarks have been included. Additionally, those developmental patterns that describe progressive levels of performance or proficiency that should emerge for a specific benchmark have also been included, along with the expected observable behaviors if the child was functioning at a specific level within that developmental pattern (see pages 8-23). It should be noted that these behaviors are meant to be examples and are not a definitive list for the specified developmental pattern.

# standard 1

Demonstrates competence in the general skills and strategies of the reading process.

## early literacy benchmark 1.1

Knows the names of the letters of the alphabet and can identify them in any context.

## category

Visual Letter Recognition

## supporting knowledge

- Understands a symbol is a representation of an object or event
- Knows there are conventional symbols as well as made-up symbols that only have personal meaning
- Uses conventional symbols (letters and numbers)
- Knows the names of the letters in the alphabet
- Understands a letter always has the same name, regardless of the context
- Understands that if you reverse a letter or change a critical feature, it is no longer the same letter (e.g., top-bottom, left-right)
- Understands that the letters of the alphabet can be put in an ABC order

## developmental patterns

Level 1. Can recognize a few (5-10) letters, most of them upper case.

## expected behaviors

- A child is more likely to recognize letters of his/her own name (first and then last) and letters frequently occurring in environmental print.
- Letters are recognized in a specific context (mostly in environmental print) and are not recognized when the context changes.
- A child does not notice if a letter is written with a wrong orientation or with a missing small detail as long as other features of the environmental context do not change.
- A child is more likely to confuse upper case letters within each of the following groups: DCGOQ, BPRSJU, EF, and NMWAVYHLITKXZ – but may make distinctions between letters that belong to different groups.
- A child knows parts of the ABC sequence by rote but does not use it to associate a letter symbol with a letter name.

Level 2. Can recognize the majority of the most frequently occurring upper case and some of the most frequently occurring lower case letters.

- A child can recognize letters both in a familiar context (own name, environmental print) and in isolation.
- A child can recognize letters across different contexts as long as they are written in a similar font. A child may have trouble recognizing "a" and "ɑ" or "g" and "ɡ" as exemplars of the same letter. A child may have difficulty recognizing handwritten letters, even his or her own.
- A child knows all of the ABC sequence for the beginning of the alphabet and can match letter symbols with letter names in alphabetic order but may have trouble matching the letters that come later in the sequence (e.g., identifies KLMNOP as one letter).

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| developmental patterns cont'd. | expected behaviors cont'd. |
| --- | --- |
| | • A child is more likely to correctly recognize the letter if the letter name and the letter sound match. For example, a child may incorrectly identify a letter if the letter name does not match the letter sound (such as "w" and "y") or if there is more than one letter that is associated with the same sound (such as "c" and "s" as in "city" and "see" or "c" and "k" as in "cat" and "kitten").<br>• A child can discriminate between the letters with distinct visual features although is likely to confuse the following pairs of letters: MN, MW, IT, db, qg; and pq. |
| Level 3. Can recognize all of the most frequently occurring upper and lower case letters, but not all of the letters. | • A child can recognize letters in a variety of contexts — familiar and unfamiliar — as well as in isolation. A child can notice that one or more letters have changed even if the other visual features of a familiar word (color, logo, etc.) remain unchanged.<br>• A child can recognize letters printed in all fonts he or she is exposed to but may make mistakes recognizing letters in handwriting of other people.<br>• A child knows the ABC sequence and can use an alphabet chart independently to correctly match the letter symbol with the letter name.<br>• A child knows that letter names and letter sounds may not match but may occasionally respond with a letter sound when asked to name a letter (and vice versa).<br>• A child can discriminate between letters that differ in their visual features as well as between letters that have similar visual features but may still confuse letters in the following pairs: "d" and "b", "q" and "g", and "p" and "q". |
| Level 4. Can recognize all upper and lower case letters. | • A child can recognize letters in any context and in isolation.<br>• A child can name letters when they are presented in an unfamiliar sequence, i.e., not in alphabetic order.<br>• A child can recognize letters in any common font or handwriting as long as they are printed and not cursive.<br>• A child can accurately produce the letter name or letter sound for all letters. |

# standard 1

Demonstrates competence in the general skills and strategies of the reading process.

## early literacy benchmark 1.2

Matches speech sounds with the letters or letter combinations that represent these sounds.

## category

Sound-To-Symbol Correspondence and Phonological Awareness

## supporting knowledge

- Produces speech sounds and combines them into words
- Focuses on the form of language delivery and develops metalinguistic control including phonological awareness(e.g., notices that "bat" and "tab" have similar elements in a contrasting order)
- Discriminates among speech sounds
- Discriminates among letter symbols
- Knows that speech sounds are represented with letter symbols
- Understands the concept of one-to-one correspondence

| developmental patterns | expected behaviors |
|---|---|
| Level 1. Can recognize a few cases of speech sounds represented by single letter symbols. | • A child can recognize some consonant sounds that have single letter symbols. The sounds matched are more likely to be the ones that appear in the beginning of the letter name (e.g., "b" is more likely to be recognized correctly than "w").<br>• A child can recognize some vowel sounds that have single letter symbols. Vowel sounds matched are more likely to be the vowel sounds that match letter names. |
| Level 2. Can recognize most speech sounds represented by single letter symbols. | • A child can recognize most consonant sounds that have single letter symbols. Consonant sounds matched are more likely to be the ones that have one-to-one correspondence with letter symbols (e.g., /b/ and "b").<br>• A child can recognize most vowel sounds that have single letter symbols. Vowel sounds matched are more likely to be vowel sounds that match letter names (such as the "e" in "bee") or short vowel sounds. |
| Level 3. Can recognize all speech sounds represented by single letter symbols. | • A child can recognize all consonant sounds that have single letter symbols. At this stage, a child can correctly match such letters as "c" or "g" with both the sounds that each of these letters commonly represents (e.g., "cat" and "city" or "goose" and "giraffe").<br>• A child can recognize all vowel sounds that have single letter symbols. At this stage, a child usually chooses the letter symbol that is most commonly used to represent a certain vowel sound (e.g., short "u" sound is more commonly represented by the letter "u" like in "up" than by the letter "o" like in "son"). |



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## developmental patterns cont'd.

Level 4. Can recognize cases of single sounds represented by more than one letter.

Level 5. Can recognize combinations of sounds represented by a combination of letters.

## expected behaviors cont'd.

- A child can recognize consonant sounds that have two letter symbols (digraphs) such as "th", "ch", and "sh" as in "that", "thumb", "chair", and "ship".
- A child can recognize vowel sounds that have two-letter symbols such as "oo", "ee", and "oy" as in "book", "boot", "beet", and"boy".

- A child can recognize combinations of two consonant sounds (blends) that have combinations of two-letter symbols (e.g., "bl", "cr", "pl", and "dr" for "black", "critter", "plane", and "drum").

# standard 1

Demonstrates competence in the general skills and strategies of the reading process.

## early literacy benchmark 1.3

Converts written word into spoken word.

## category

Sight Word Recognition and Decoding

## supporting knowledge

- Understands the written word can be spoken and the spoken word can be written
- Consolidates phonological awareness to develop the alphabetic principle
- Knows that sometime he or she may not know the meaning of a word
- Applies syntactic, semantic, and pragmatic knowledge from oral language experiences to reading and writing
- Develops literacy-specific syntactic, semantic, and pragmatic knowledge
- Applies the alphabetic principle to decode or recognize unknown words
- Uses visual features for instant recognition of words
- Uses strategies to identify or clarify uknown words (e.g., context clues, picture clues)
- Uses surrounding letters for letter recognition

## developmental patterns

Level 1. Understands that written words have specific meaning.

## expected behaviors

- When asked about a word, a child provides a response from the appropriate semantic field but may not be constrained by the specific word. A child may "read" the same word differently every time but retains the same "meaning" (e.g., "Pepsi" can be read both as "soda" and as "pop").
- A child knows that certain words stand for certain objects but expects them to describe these objects the same way pictures do.
- A child may expect two words that signify similar objects to look alike.
- A child may confuse properties of the words with the properties of the objects they denote (e.g., long words stand for large objects).
- A child may use picture cues and environmental contexts to confirm the meaning of a word.

Level 2. Consistently recognizes a frequently seen word in a familiar context.

- A child can repeatedly recognize a word only if the contexts are identical or similar (e.g., always recognizes the word "STOP" as long as it is written on a red octagonal-shaped stop sign).
- A child uses a very small number of relevant visual features and continues to use some irrelevant ones. Consistency of use is usually low (e.g., may recognize "I" because it is always capitalized; at the same time, he or she can recognize "LOOK" only when the two "O"s are depicted as eyes.
- When asked to read a word in a familiar context, a child may substitute another word based on its meaning and its length.
- A child begins to understand that if words sound alike they should look alike.

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| developmental patterns cont'd. | expected behaviors cont'd. |
| --- | --- |
| Level 3. Consistently recognizes a short word across different contexts. | • A child can read one- and two-letter words and r65ecognizes some three-letter words if they occur frequently (e.g., "the", "mom", "dad"). A child cannot read longer words even if he or she knows the letters and some parts of these words.<br>• A child can decode the first and sometimes the last letter of a word.<br>• When asked to read a new word, a child starts reading from the left but may skip the whole middle of the word or its ending.<br>• When asked to read a new word, a child may substitute another word based on some of the visual cues (e.g., reading "I" for "It" when "it" begins a sentence or reading "little" for "letter" on the basis of the double "t" in the middle) or substitutes words based on meaning similarity.<br>• A child uses a very small number of relevant visual features but mostly for sight recognition of high frequency words. He or she annot always apply these features to new words (e.g., can read "and" but may have trouble recognizing "sand").<br>• Some visual features of letters that are critical can still be missing (e.g., orientation in "b" and "d" or number of straight lines in "n" and "m"). |
| Level 4. Applies alphabetic principle to recognition of unfamiliar words. | • When asked to read a word, a child sounds out the letters of the word and then may or may not blend the individual sounds or sound combinations.<br>• When asked to read a word, a child usually pays attention to the first and the last letter-sound relationships, but may ignore the letters or sounds in the middle of the word. He or she knows that rhyming words have similar endings. He or she may consider two words to be the same if they only differ in the order of letters in the middle.<br>• A child may occasionally alternate between sounding out the letters of the word and saying the letter names.<br>• When asked to read a word, a child scans the word mostly from left to right, or may have occasional reversals in directionality if words make sense both ways (e.g., "saw" and "was"). He or she may still skip some letters.<br>• Sight recognition is limited to short- and medium-length words. Speed and accuracy of recognition depends on frequency of these words. Some high-frequency, long words can be recognized.<br>• A child may sight read many four- and five-letter words and may read some longer words if they occur frequently. He or she is more likely to make mistakes in longer words than in four- and five-letter words. |

## developmental patterns cont'd.

Level 5. Applies decoding strategies and knowledge of some sight words to reading of unfamiliar words.

## expected behaviors cont'd.

- If asked to read a word repeatedly, a child always reads this word the same way and knows that for two words to be read the same way they usually have to be written identically. While reading aloud, self-corrects with no prompting if he or she reads letter combinations in the wrong order.
- A child always starts reading from left to right and scans sequentially individual letters and larger word chunks following left-right directionality.
- A child can break words into chunks ready to be blended and can extract chunks of several letters (e.g., "ing", "ed", or "est"). Decoding of the single letters as well as chunks depends on the surrounding letters (e.g., silent "e" at the end of a word or the sounds made by letters "c" or "g" depending on the vowel that follows).
- A child can sight read long words only if they occur frequently. When facing a long word that seems unfamiliar, he or she tries to decode, breaking words into meaningful chunks (prefix, suffix, etc.). A child can recognize chunks of familiar words when they are present in a new word.

## standard 1

Demonstrates competence in the general skills and strategies of the reading process.

### early literacy benchmark 1.4

Understands the basic concepts of written language.

### category

Concepts of Print

### supporting knowledge

- Understands that a symbol is a representation of an object or event
- Knows that there are conventional symbols as well as made-up symbols that only have personal meaning
- Uses conventional symbols (letters and numbers)
- Understands that a written word has a specific meaning
- Knows that words are composed of letters and that the order of the letters in the word is important
- Knows that when you read, you read every letter in the word
- Knows that a sentence is a unit of meaning that represents a complete thought
- Knows that sentences are composed of words and that the order of words in a sentence affects its meaning.

| developmental patterns | expected behaviors |
|---|---|
| Level 1. Understands that alphabetic symbols differ from other systems. | • A child is content to mix letters with other less conventional pictorial symbols.<br>• A child recognizes that numbers and letters are conventional symbols.<br>• A child recognizes that only letters have both a name and a sound match. |
| Level 2. Understands that written language consists of discreet words. | • When asked to point to words in print, a child points to each word separately and does not sweep a finger across two or more words.<br>• When asked to point to letters in words in print, a child points to each letter separately and does not miss any letter.<br>• When asked to match two words, a child can match words consistently letter-by-letter in any context (including long words, different fonts, etc.). |
| Level 3. Understands the concept of a sentence. | • When listening to someone read, a child can distinguish between a short pause (at a comma) and a long pause or change of intonation indicating the end of a sentence. A child never interrupts with questions and comments in the middle of a sentence, whether short or long. |

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# standard 1

Demonstrates competence in the general skills and strategies of the reading process.

## early literacy benchmark 1.5

Knows the basic conventions of reading (e.g., purpose, parts, elements, and procedures).

## category

Conventions of Reading and Text Comprehension

## supporting knowledge

- Uses strategies to monitor comprehension during oral interactions
- Uses strategies to monitor comprehension while engaged in oral exchanges about written material
- Knows that books, shopping lists, signs, menus, etc. contain stories, reminders, directions, choices, etc., and are accessed through reading and created through writing
- Understands that print carries a message
- Understands that the same print always carries the same message
- Understands that reading words differs from processing pictures
- Knows where to start reading
- Knows to read from left to right and from top to bottom
- Understands a sentence may continue at the beginning of the next line of a text
- Knows where the text begins and ends
- Understands pictures and captions can provide meaning for what is being read
- Uses background knowledge to assist comprehension but does not use it to replace information in the text

| developmental patterns | expected behaviors |
|---|---|
| Level 1. Knows how to handle printed materials. | • A child knows how to hold the book to read it.<br>• A child knows about the front and the back of the book.<br>• A child knows where to start reading a story and can always point to the beginning of the story regardless of how the page looks.<br>• A child knows how to turn pages in a book or magazine.<br>• A child knows specific skills for handling and paying attention to menus, lists, signs, and labels. |
| Level 2. Knows the purpose of books and other printed materials. | • A child knows that when somebody opens a familiar book on a familiar page, he or she can expect to hear a specific part of a story. A child does not know if it is print or pictures that carry the message (similar response to familiar menus, CD covers, etc.).<br>• A child may expect all books to have pictures and assumes that reading involves looking at pictures.<br>• A child may expect that all signs and labels have characteristic color, shape, or font, and the meaning is conveyed by the characteristic design features regardless of the letters on the sign or label. |
| Level 3. Knows the functions of the basic elements of printed material. | • A child can differentiate consistently between print and pictures and knows the salient features of print. He or she pays attention to all letters in a word and to all words in a sentence even when some distractors are present. A child knows that two pictures can describe the same object even if they look different or |



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| developmental patterns cont'd. | expected behaviors cont'd. |
| --- | --- |
| | are missing some details (a house with or without a chimney is still a house), but that two words describe the same object only if the letters in both of them match ("horse" and "house" stand for two different objects).<br>• A child may expect that any desired information about the topic of the book can be derived from having read the book (e.g., children may respond to "The Three Little Pigs" by expecting the text to explain why the pigs' mother did not run into the scene to help).<br>• A child can listen to a book without pictures or with very schematic pictures, always uses text as a source of meaning and may refer to the text to explain pictures and not the other way around. He or she refers to the text when answering comprehension questions. When text and pictures do not match, a child chooses text over pictures and explains why.<br>• A child can reliably identify different printed characters (letters, numbers, and commonly used symbols) in any font. Can explain the difference among fonts by referring to attributes of letters and aspects of design. |
| Level 4. Knows about procedures involved in reading. | • A child points at the words following left to right directionality, consistently independent of the words or line length.<br>• A child points to the lines of print following top-to-bottom directionality, independent of the number of lines on a page or page layout.<br>• A child can consistently point to the first word on a line when presented with any format of print.<br>• A child consistently sweeps at the end of the line independent of the attributes of print. He or she never sweeps in the middle of the line. |
| Level 5. Knows about the relationship between meaning and printed text. | • A child can indicate comprehension by recalling a sequence of elements from the text (for example, arranging a set of pictures to match the sequence of events in the narrative).<br>• A child uses text cues independent of their position in the text even with unfamiliar texts (for example, given a written sentence "we ran after the bear came" the child recognizes that the bear came first in spite of the order mentioned in the text).<br>• A child sees the text as the only source of the language used in reading aloud. He or she may refer specifically to parts of the text for additional information ("where in the book do they say...?"). |

# standard 2

Demonstrates competence in the general skills and strategies of the writing process.

## early literacy benchmark 2.1

Knows that the purpose of writing is to communicate with oneself and others.

## category

Purpose of Writing, Text Comprehension, and Oral Language Development

## supporting knowledge

- Controls syntactic, semantic, and pragmatic aspects of language
- Uses strategies to monitor comprehension while listening
- Uses strategies to monitor comprehension while engaged in oral exchanges about written material
- Knows that books, shopping lists, signs, menus, etc. contain stories, reminders, directions, choices, etc., and are accessed through reading and created through writing
- Understands that print carries a message
- Understands that the same print always carries the same message
- Produces speech sounds and combines them into words
- Focuses on the form of language delivery and develops metalinguistic control including phonemic awareness (e.g., when noticing that "bat" and "tab" have similar elements but in contrasting order)
- Understands that writing is a way of communicating personal thoughts, feelings, and experiences
- Understands that writing is a form of communication that can be read and re-read by the writer and by the other people
- Understands that the words used to deliver a message make a difference in how that message is communicated

| developmental patterns | expected behaviors |
|---|---|
| Level 1. Assumes that making any marks is writing. | • A child draws, scribbles, or makes any marks and calls this process "writing".<br>• A child may pretend to read his or her own message.<br>• A child's "re-reading" of own message is inconsistent from one time to another. |
| Level 2. Understands that one can represent oral message with written language. | • A child may attempt to formulate, in a general way .what the message will be before writing (e.g., "I will write a story about my teddy bear").<br>• The written message may differ from the intended message.<br>• "Re-reading" of the message may differ from the initial message.<br>• "Re-reading" may be more related to remembering the writing event than to interpreting the written marks. |
| Level 3. Understands that once the oral message is represented with the written words it should be read the same way every time. | • Written message usually closely approximates the oral message it represents.<br>• A child is able to re-read his or her own message several days after the writing takes place.<br>• A child generally expects others to be able to read the message the same way the child reads it. |

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# standard 2

Demonstrates competence in the general skills and strategies of the writing process.

## early literacy benchmark 2.2

Applies alphabetic principle when writing, with increasing complexity and conventionality.

## category

Alphabetic Principle, Phonological Awareness, Sound-to-Symbol Correspondence, and Orthographic Knowledge

## supporting knowledge

- Understands that a symbol is a representation of an object or event
- Knows there are conventional symbols as well as made-up symbols that only have personal meaning
- Uses conventional symbols (letters and numbers)
- Discriminates between letter symbols
- Knows that written words are comprised of letters
- Understands that if you reverse a letter or change a critical feature, it is no longer the same letter
- Discriminates between speech sounds
- Knows that spoken words are comprised of sounds
- Knows that speech sounds are represented with letter symbols
- Understands the concept of one-to-one correspondence
- Knows that the sound and letter composition of a word affects its meaning
- Knows that the order of letters and sounds affect the meaning of the word
- Knows that when you read, you read every letter in the word
- Knows letter-sound correspondences
- Knows that the order of the letters in a written word matches the order of the sounds in a spoken word
- Knows that there is a correct way to spell a word

| developmental patterns | expected behaviors |
|---|---|
| Level 1. Knows that different sounds in a word are represented by different symbols. Knows that more sounds in a word require more written symbols | • Words are represented by a letter string that consists of different letters and letter-like symbols.<br>• Longer words or messages are represented by longer letter strings. |
| Level 2. Identifies the most salient sound in a spoken word and attempts to represent it in writing | • Usually, the beginning sound is represented.<br>• Isolated vowels are often represented (e.g., "I" or "a").<br>• A child may represent sound by association to the letter name rather than a conventional sound-symbol correspondence.<br>• Inconsistent written representations of the same sound occur.<br>• Representation may follow the child's articulation of a sound regardless of the accuracy of that articulation (e.g., "g" for "drum" reflects the child's articulation of the blend "dr"). |
| Level 3. Identifies 2 or 3 sounds in a spoken word (usually beginning and ending) and attempts to represent them in writing in the corresponding order | • Each word is represented by one to three letters mostly in the correct order in relation to the sounds they represent.<br>• Most of the single consonant sounds and some vowels are represented. Vowels are more likely to be represented when in medial position ("cat", "sun") or are in the beginning of the word ("is", "it"). |





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| developmental patterns | expected behaviors |
| --- | --- |
| | • The first and the last sounds are represented by letters in the proper order.<br>• Medial sounds may be represented but they may be placed out of order. after the symbol representing the final sound.<br>• Some blends are represented.<br>• Some more complex sound combinations are represented ("ing"). |
| Level 4. Identifies all component sounds in a spoken word and attempts to represent them in writing in the corresponding order, but estimates spelling based on sound identification. | • Each word is represented by a sequence of letters in the order that follows the sequence of sounds, including blends.<br>• A child may use alternate spellings for the same sound in different writing samples (e.g., "cat" and "kat").<br>• A child may use letter names to represent a sound in an unfamiliar word (e.g., "lf" for "elf") even though he or she relies on the letter-sound relationship when using the same letter in a familiar word (e.g., "love"). |
| Level 5. Combines known conventional spelling rules with own estimation based on sound identification. | • A child spells mainly with own estimations.<br>• A child may use the known conventional spelling of high frequency words to develop spelling for unknown words (e.g., "buy" is spelled "by" by analogy with "my").<br>• A child may add known digraphs (e.g., "th" or "ch") or double vowel combinations (e.g., "ee" or "oo") to known correspondences between sounds and single letters.<br>• A child may over-generalize a spelling rule (e.g., by adding a silent "e" at the end of all words) for a time. |
| Level 6. Uses conventional spelling for most words written. | • A child may combine conventional spelling of high frequency words with consistent estimated spelling of other words.<br>• A child may use the conventional spelling of known words to spell new words, even though this results in an unconventional spelling.<br>• In the case of an unknown word, the closest rule is applied. |

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# standard 2

Demonstrates competence in the general skills and strategies of the writing process.

## early literacy benchmark 2.3

Uses the basic conventions of writing (e.g., prints upper and lower case letters with proper directionality, spacing, punctuation, and capitalization).

## category

Letter formation and Conventions of Writing

## supporting knowledge

- Knows that a symbol is a representation of an object or event
- Knows that there are conventional symbols as well as made-up symbols that only have personal meaning
- Uses conventional symbols
- Knows the shapes of all letters of alphabet in upper and lower case
- Knows that if you reverse a letter, or change a crucial feature, it is no longer the same letter
- Knows that written words are composed of letters and that the order of the letters in the word is important
- Uses left to right directionality
- Uses hand positioning and pencil grip as a means of controlling writing instrument
- Forms each of the letters in the alphabet in upper and lower case
- Uses spaces to separate words while writing
- Knows that a sentence should end with a punctuation mark
- Knows that upper case should be used at the beginning of a sentence, for the pronoun "I", and for proper names

| developmental patterns | expected behaviors |
|---|---|
| Level 1. Attempts to act out the process of writing. | • A child draws using random lines.<br>• A child draws using continuous lines (e.g., spirals and circles).<br>• A child scribbles. |
| Level 2. Attempts to represent oral language in writing. | • A child produces drawings that represent a spoken language message.<br>• A child produces letter-like forms mixed with drawings to represent spoken language. He or she may include actual letters. |
| Level 3. Uses proper letter formation in writing. | • A child produces letters that are generally consistent in shape with some variations and some incorrect elements (e.g., "n" for "h" or "C" for "G").<br>• A child produces letters that are inconsistent in orientation (e.g., "M" for "W" or "b" for "d").<br>• A child consistently produces correctly formed letters. |
| Level 4. Experiments with conventions of writing when writing words. | • A child produces letters combined in words and word-like sequences, following mostly left to right direction with random use of spaces.<br>• Punctuation marks or other marks may be used to indicate spaces.<br>• Upper case may be used in any words and may be used alternately with the lower case letters. |

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| developmental patterns | expected behaviors |
| --- | --- |
| Level 5. Consolidates some conventions of writing. | • Writing follows left-right direction.<br>• Spaces are used to separate words within one sentence and to separate two sentences.<br>• Capitalization and punctuation are used inconsistently. |
| Level 6. Knows about directionality, spacing, and some uses for punctuation and capitalization. | • Upper case letters are used in the beginning of sentences, for the pronoun "I" and for some proper names.<br>• Punctuation is used at the end of sentences but choices among period, question mark, and exclamation point are not fully conventional. |

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# Appendix A

## Research and Theory On Early Childhood Development Reviewed


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# Appendix B

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# Appendix C

## Definitions of Terms

*Alphabetic principle*
Knowledge that a sequence of letters in a printed word matches a sequence of sounds in a spoken word. A child who has developed an understanding of the alphabetic principle expects longer words to be represented with more letters as well as words that start with the same sound to have the same letter in the beginning.

*Benchmark*
A benchmark is a statement that reflects a developmental level of the knowledge or skill that defines the general category articulated by the standard. A benchmark translates the standard into what the student should understand and be able to do at developmentally appropriate levels.

*Conventional Symbols*
Symbols for which there is universal agreement on their meaning. For example, letters, numbers, and some icons such as arrows are conventional symbols.

*Developmental Patterns*
Developmental patterns describe the progressive levels of performance or proficiency that would be expected to emerge for a specific benchmark.

*Expected Behaviors*
Expected behaviors are examples of what a teacher would observe if a child had a specific developmental pattern. These examples help teachers apply the developmental patterns and benchmarks and are not a definitive list of what must be present in order to have a specific developmental pattern.

*Metalinguistic Control*
Ability to control one's use of language based on the knowledge of how the language operates. For example, a child can self-correct or correct another person when a sentence is not grammatically correct or when a certain word is used inappropriately.

*Phonological Awareness*
Ability to reflect on the sound structure of spoken language. For example, a child who has developed phonological awareness notices when two words rhyme or when they start with the same sound.

*Pragmatic Knowledge*
Knowledge of how to communicate with others in an effective and appropriate way. For example, a child who has pragmatic knowledge, can modify the way he or she talks depending on the audience is (adults vs. other children, familiar vs. strangers, etc.).

*Semantic Knowledge*
Knowledge of the meanings of words and word combinations. For example, a child who has semantic knowledge has a large vocabulary he or she can use to adequately describe his or her life experiences. This child is also expanding the existing vocabulary to gradually incorporate more abstract words.

*Standard*
A standard is a general statement that represents the information and skills, or both, that students should understand or be able to do.

*Supporting Knowledge*
The supporting knowledge identifies the underlying knowledge and skills that students would need for the specified benchmark.

*Syntactic Knowledge*
Knowledge of the rules by which words are arranged into sentences. For example, a child who has syntactic knowledge is able to understand and speak in grammatically correct sentences using all parts of speech appropriately.